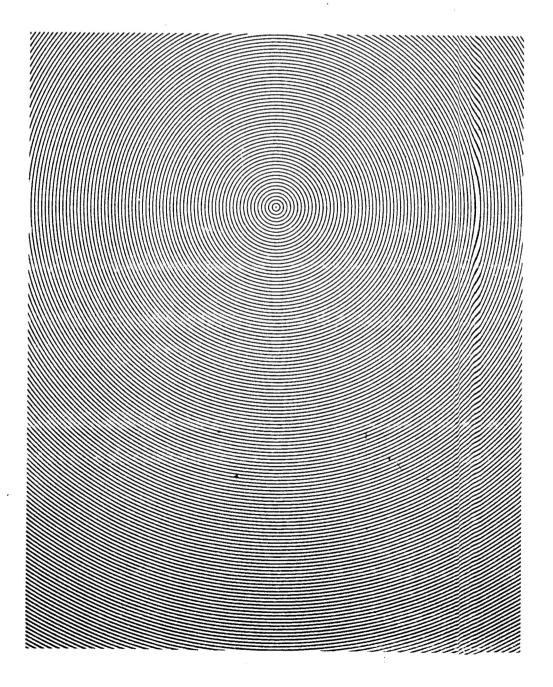


# Verstärker VG 20/VG 30

## Service manual



## TECHNISCHE DATEN

Intermodulationsverzerrung	
(70 Hz: 7 kHz = 4:1)	Weniger als 0,9%
	bei 10 W an 4 Ohm
Restrauschen	
Dämpfungsfaktor	20 (4 Ohm)
	40 (8 Ohm)
Eingangsempfindlichkeit/	•
Impedanz	
Phono	2,5 mV/50 kOhm
AUX	
TAPE	150 mV/50 kOhm
Max. Eingangspegel	
Phono	150 mV
Geräuschspannungs-	
abstand (IHF, A)	
Phone	80 dB
Tuner, AUX, Tape	92 dB
Frequenzumfang	
Phono	Standard RIAA-Kurve ±1 dB
	40 Hz – 20 kHz
Tuner, AUX, Tape	20 Hz - 25 kHz, ±3 dB
Klangregelung	
Baß	±8 dB bei 100 Hz
Höhen	±8 dB bei 10 kHz
Gehörrichtige Laut-	.40
stärkekontur	+6 dB bei 100 Hz,
(-30 dB) Lautsprecherimpedanz	+6 dB bei 10 kHz
Lautsprecherimpedanz	4 Ohm
	71 1 2 2 2 2 2
Non-communication of the communication of the commu	

#### **ALLGEMEINES**

 Leistungsaufnahme
 140 Watt (VG20)

 200 Watt (VG30)

 Netzspannung
 220 V Wechselstrom, 50 Hz

 Abmessungen
 421(B) × 240(T) × 79(H) mm

 Nettogewicht (Ca.)
 3.5 Kg (VG20)

 3.6 Kg (VG30)

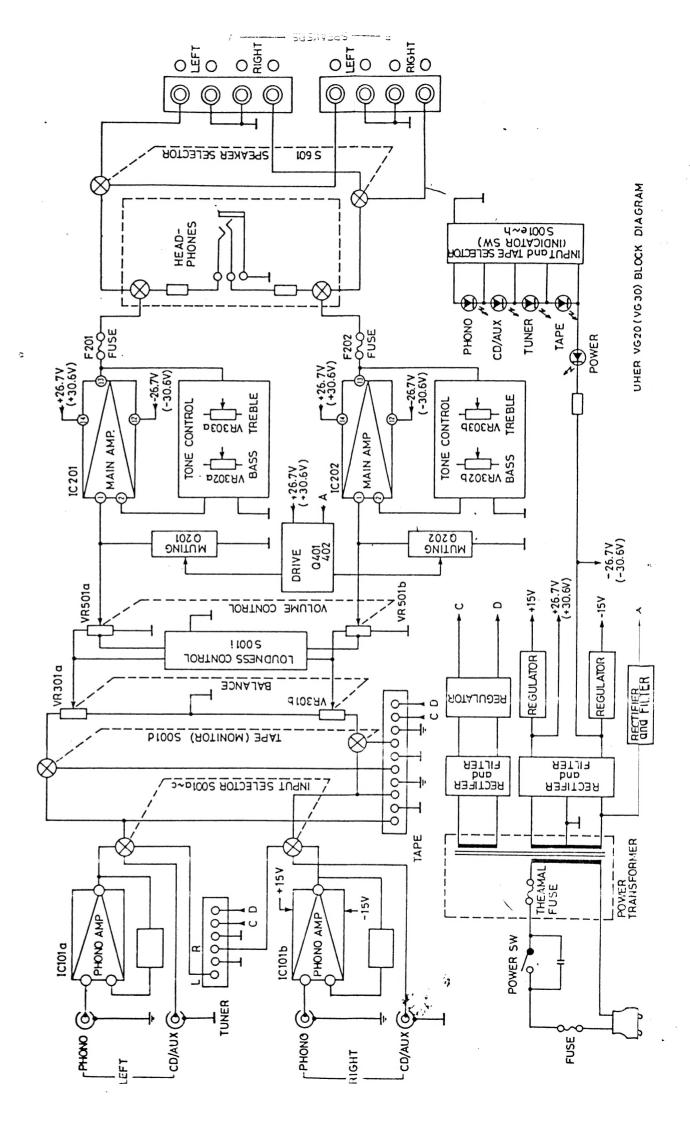
Änderungen der technischen Daten und des Designs bleiben ohne Ankündigung vorbehalten.

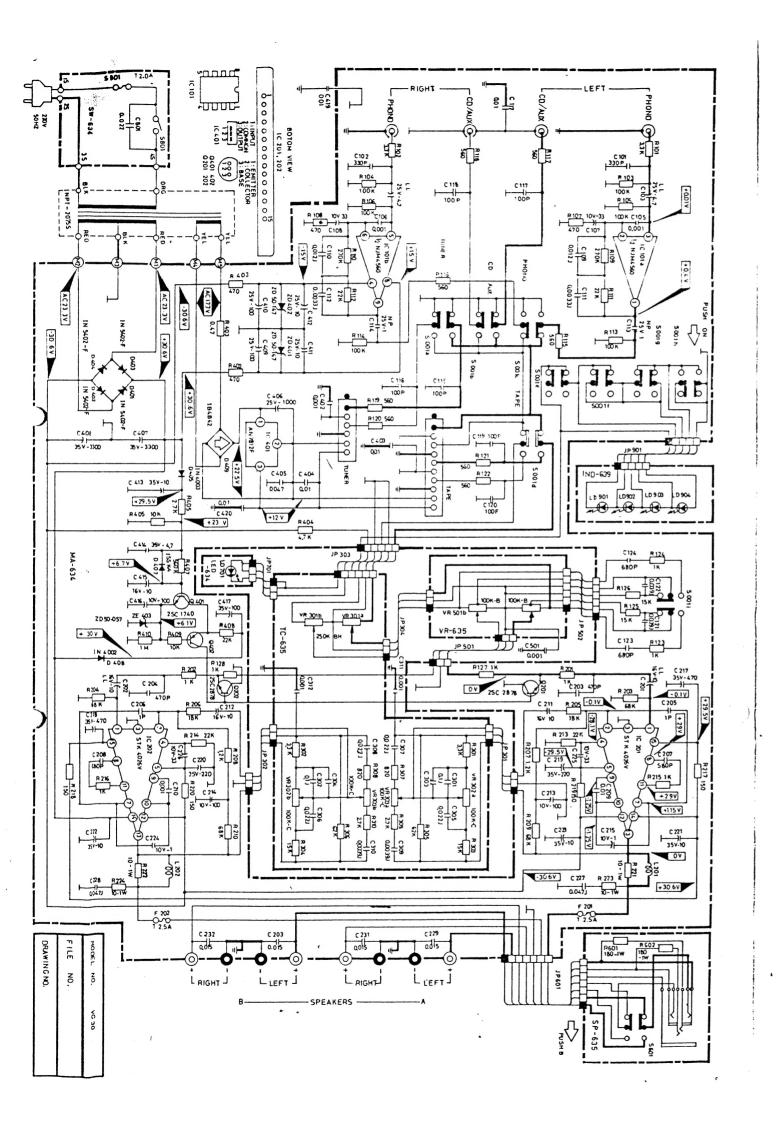
## **SPECIFICATIONS**

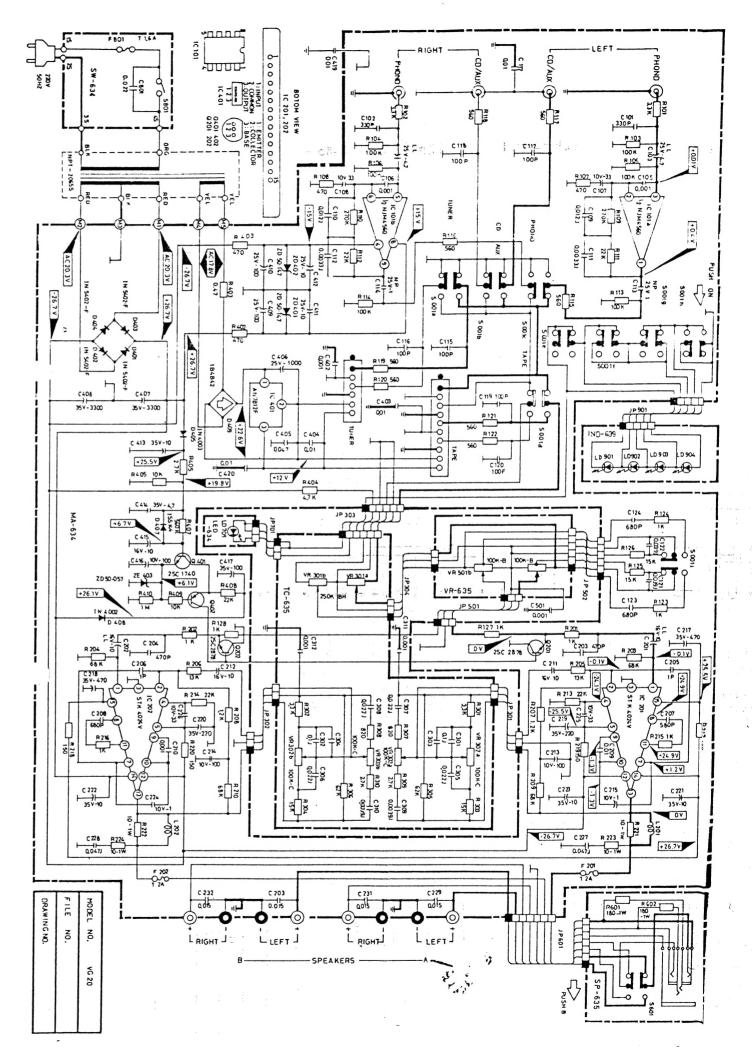
the control of the co	
Intermodulation Distortion	
$(70 \text{ Hz}: 7 \text{ kHz} = 4:1) \dots$	Less than 0.9%
	at 10 watts into 4 ohms
Residual Noise	0.5 mV
Damping Factor	20 (4 ohms)
	40 (8 ohms)
Jut Sensitivity/Impedance	
Phono	
AUX	150 mV/50 k ohms
TAPE	150 mV/50 k ohms
Maximum Input Level	
Phono	150 mV
Signal-to-Noise Ratio (IHF, A)	
Phono	
Tuner, AUX, Tape	92 dB
Frequency Response	
Phono	RIAA standard curve ±1 dB
	40 Hz – 20 kHz
Tuner, AUX, Tape	20 Hz - 25 kHz, ±3 dB
Tone Control	
Bass	±8 dB at 100 Hz
Treble	
Loudness Control	+6 dB at 100 Hz
(-30 dB Volume Level)	+6 dB at 10 kHz
Speaker Impedance	4 ohms
•	

#### **GENERAL**

Power Consumption			
	200 Watts (VG30)		
Power Supply	AC 220 V 50 Hz		
Dimensions	$421(W) \times 240(D) \times 79(H) \text{ mm}$		
Net weight (approx.)			
•	3.6 kg (VG30)		
Specifications and design are subject to change without notice.			







Ref. No.	a,	ŧγ	's Parts List (VG20	/VG30) • (3): VG30  Description
	2	3		
1M 1	1	1	N10380-1 N42326-S	Front Panel Push Button
1M 4	1	1	N438G6-BK	Push Button
1M 5	4	4	N44453 BK C N44453 BK BU	Push Button Push Button
1M 7	3	.3	N44454 BK-R	Slide Knob
1M 8	1	1	N44455-BK-R N30867-1	Slide Knob
1M11	-	1	N30867 3	Display Window Display Window
1M15	1	-	N21320	Cabinet
1M15 1M16	1	1	N21341 N21322-1A	Cabinet Reor Panel
1M16	-	1	N21340-1	Rear Panel
1M17	1	1	N10381 4 N10394	Bottom Chassis Bottom Chassis
1M20	4	4	NO.7102	Foot
1M25 1M26	1	1	N44515 N44530	Volume Cloth , Volume Cloth , 3
111120	١.١	'	1444530	Volume Clotti, 3
2M 1	1	1	N44456	Fittings R (Heat Sink)
2M 2 2M 3	1	1	N44457 N44458	Fittings L (Heat Sink) Fittings (Switch)
2M 4	2	-	N42722	Fittings (P.T.)
2M 5	-	!	N30882	Support Chassis (P.T.)
2M 6 2M 9	-	1	N44553 N44357	Metal Plate Knob Shaft
2M10	-	1	N30880-10	Heat Sink
2M11 2M12	1	1	N30866A-50 N44516	Heat Sink Insulation Cover
2M13	4	4	N44243	Tape, Double Faced
2M14 2M15	1	1	N44522-40BK	Heat Sink
2M15	3	2	N44558 SL. 1024	Spacer Label, Serial No.
2M17	1	1	N41386	Label, Passed
2M18 2M19		2	N41853-252 N41853-202	Label, Fuse Label, Fuse
2M20	1	i	OM-596A	Instruction Manual
2M21 2M22	1	1	N41318-1 N40487	Polyethylene Bag
2M24	2	2	N21324	Polyethylene Bag (Accessories) Packing Pad
2M27	1	-	N44459	Shipping Carton
2M27 2M28	[-]	1	N44496 N44559	Shipping Carton Packing Pad (Cabi)
2M29	-	1	N44560	Packing Pad (Bottom)
3M 1	2	2	TPM+30X08 Y	Tap Screw P, Round Head, Y
3M 2	2	2	TPM+30X08-Y	Tap Screw P. Round Head, Y
3M 3 3M 4	;	1	TPM+30X08-Y TPM+30X08-Y	Tap Screw P, Round Head, Y Tap Screw P, Round Head, Y
3M 5	3	3	TPM+30X08-Y	Tap Screw P, Round Head, Y
3M 8 3M 9	3	3	TPM+30X08-B TPM+30X10-B	Tap Screw P, Round Head, B Tap Screw P, Round Head, B
3M10	2	2	TPM+30X10-B	Tap Screw P, Round Head, B
3M16 3M17	2 2	2	TSB+30X06-N	Tap Screw S, Bind Head, N
3M18	2	2	TSB+30X06 N TSB+30X06 N	Tap Screw S, Bind Head, N Tap Screw S, Bind Head, N
3M19	1	1	TSB+30X06 N	Tap Screw S, Bind Head, N
3M20 3M23	2	1 2	TSB+30X06 N TSB+30X10 N	Tap Screw S, Bind Head, N Tap Screw S, Bind Head, N
3M26	-	2	TSB+30×08 B	Tap Screw S, Bind Head, B
3M27 3M28	4	2	TSB+30X08 B	Tap Screw S, Bind Head, B Tap Screw S, Bind Head, B
3M29	1	1	TSB+30X08-8 TSB+30X08-B	Tap Screw S, Bind Head, B
3M30	4	4	TSB+30X08-B	Tap Screw S, Bind Head, B
4M 1	2	2	TSC+30X08-Y	Tap Screw S, Washer Faced, Y
-3M 5	4	4	TSB+40X10-Y	Tap Screw S, Bind Head, Y
4M 8	2	4	TST+40X08-N SSB+40X40-Y	Tap Screw S, Truss, N Screw, Bind Head, Y
4M10	4	4	ZP+STR26X16-2Y	Tap Screw, Pan Head, Y
4M13	1	3	T88+30X08-B T88+30X08-Y	Tap Screw B, Bind Head, B Tap Screw B, Bind Head, Y
4M15	2	2	TBB+30X08-Y	Tap Screw B, Bind Head, Y
4M16	-	4	TBB+30X08-Y	Tap Screw B, Bind Head, Y
4M18 4M19	4	1	2AWX0826-05-Y 2AWX0830-05-N	Plain Washer, Y Plain Washer, N
4M22	1	1	2AWX1230 08-Y	Plain Washer, Y
6E 1	1	_	NPT 2065S	Power Transformer
6E 1	-	1	NPT-2075S	Power Transformer
5£ 5 6£ 6	1	1	ACC 005D3 4EC1 SR-3P4	Line Cord Cord Stopper
EE 8	i	i	UB-0027	Binding Post
	1	_	38A1P01A	P. C. Board Ass'y
				(LED ; MA ; RE ; SW 634A)
-	-	3	38A1P01C	P.C. Board Ass'y (LED.; MA.; RE.; SW 634A)
	1	-	38A1P02A	P.C.Board Ass'y (SP-; TC-; VR-635)
	-	1	38A1P02C	P.C.Board Ass'y (SP-; TC-; VR-635)
	1	-	38A1P03A	P.C.Board Ass'y (IND-639)
	-	1	38A1P03C	P.C.Board Ass'y

